

Claims: What Is Claimed:

Claim 1. An endotracheal intubation device comprising:

an optical housing assembly including an image conducting system having a distal portion and extending from a first end of said optical housing assembly, and a proximal portion and
5 extending from a second end of said optical housing assembly through a positional viewing mechanism pivotally attached at a first end of said positional viewing mechanism to said second end of said optical housing assembly. Said positional viewing mechanism having at its second end a viewing system wherein said image conducting system optically communicates with said viewing system through said positional viewing mechanism;

10 a scabbard sized to sealably receive a portion of said first end of said optical housing assembly and said image conducting system, wherein said scabbard comprises a curved structure having a terminal edge surface and a plurality of spaced conduits extending through said scabbard wherein: (i) a first one of said conduits extends longitudinally through said scabbard and has at least one optically open end at said terminal edge surface of said scabbard, (ii) a second one of said
15 conduits extends along an outer surface portion of said scabbard and defines an open channel that is sized to removably receive an endotracheal tube and comprises two open ends, one of which opens onto said terminal edge surface of said scabbard to provide a predictable point and direction for insertion of said endotracheal tube, and (iii) a third one of said conduits extends longitudinally through said scabbard and comprises two open ends, a first end of which opens onto said terminal
20 edge surface of said scabbard and a second end of which being adapted to for connection to a vacuum or supplemental oxygen providing source; and

a power source electrically connected to said image conducting system to provide an

illuminated area at said terminal edge surface of said scabbard from said distal portion of said image conducting system and for transmission of images from the said illuminated area to said positional viewing mechanism located at said proximal end of said image conducting system.

5 Claim 2. An endotracheal intubation device according to claim 1 wherein said scabbard is formed from a polymer so as to comprise an intubation blade like structure for inserting into a patient's mouth, formed so as to generally comprise the shape of the anatomical contour of a patient's tongue.

10 Claim 3. An endotracheal intubation device according to claim 1 having a lens sealingly disposed over said open end of said first one of said conduits on said terminal edge surface, and illuminatingly in communication with said distal end of said image conducting system.

Claim 4. An endotracheal intubation device according to claim 1 wherein said power source electrically connected to said image conducting system is a battery.

15 Claim 5. An endotracheal intubation device according to claim 1 wherein said open channel provides a serpentine open channel that is sized so as to firmly, but releasably accommodate a plurality of sizes of said endotracheal tube.

Claim 6. An endotracheal intubation device according to claim 1 wherein said open channel is partially obstructed by a plurality of spaced-apart, interdigitated fingers so as to firmly, but releasably accommodate a plurality of sizes of said endotracheal tube.

20 Claim 7. An endotracheal intubation device according to claim 1 wherein said image conducting system is elongate and flexible.

Claim 8. An endotracheal intubation device according to claim 1 wherein said image conducting system is an optical fiber bundle.

Claim 9. An endotracheal intubation device according to claim 1 wherein said image conducting system is a digital conducting system.

Claim 10. An endotracheal intubation device according to claim 1 wherein said image conducting system is a combination of an optical fiber bundle and a digital conducting system.

5 Claim 11. An endotracheal intubation device according to claim 1 wherein said positional viewing mechanism's said positional attachment is produced with a sufficiently frictional fit for supporting and maintaining said positional viewing mechanism in a desired position and orientation.

Claim 12. An endotracheal intubation device according to claim 1 comprising a port arranged at said first end of said scabbard in fluid flow communication with said second conduit.

10 Claim 13. An endotracheal intubation device according to claim 1 wherein said optical housing assembly has an exterior surface with curvature to effectively accommodate the hand grip of an operator.

Claim 14. An endotracheal intubation device according to claim 1 wherein said positional viewing mechanism allows for accurate visualization of the patient's target organs by the operator
15 at a distance within a comfortable field of vision of the operator from said positional viewing mechanism.

Claim 15. An endotracheal intubation device according to claim 1 wherein said scabbard is detachable from said first end of said optical housing assembly and is replaceable or disposable.